



ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON 25, D.C.

INTERNATIONAL SECURITY AFFAIRS

June 17, 1963

Dear Mac;

Attached is a memorandum which, with its appendixes, gives a sense of the flow of the public debate over the missile gap in the late 1950s. Out of the welter of inconsistent statements, it is possible to find statements by Government officials such as Secretary of Defense Neil McElroy, Chairman of the Joint Chiefs Nathan Twining, CIA Director Allen Dulles, Air Force Secretary James Douglas, and Director of Defense Research and Engineering Dr. Herbert York in which each acknowledges that our ICBM program is or is expected to be behind that of the USSR.

Note that the statements by Senator Kennedy during this period (Appendix B) display a sophisticated appreciation of the fact that our lag in long-range missiles is only one aspect of a defense problem which turns on two factors -- the expected Soviet ICBM inventory and the limitations and vulnerabilities of U.S. strategic forces. The broader defense program which Senator Kennedy was pushing at that time resembled many of the proposals which General Taylor's book set forth and many of the suggestions made by Dr. Edward Teller and others in the 1958 Hearings of the Senate Committee on Armed Forces on the satellite and missile programs. It also resembles the defense program which he is now pursuing as President.

I don't recall that the President himself has ever said that the missile gap no longer exists. Of course, now we are through the predicted critical period of the early 1960s and we now have the benefit of the intelligence break-through in late 1961. Yet by 1961, even before that break-through, three things markedly reduced the vulnerability to be expected of our retaliatory forces to attack by the estimated Soviet strategic forces -- and hence reduced the real significance of the so-called gap. First, there had been modest but significant downward revision in our intelligence estimates of the Soviet ICBM program. Second, a cumulative series of defense improvements, including early warning, had begun to make themselves felt, and the first three Polaris submarines went on station in 1961. Third, although President Kennedy's own defense program would have its major impact in succeeding years, the increase in SAC's 15 minute ground

alert from one-third to one-half of its aircraft added immediately to SAC survivability.

All in all, the public record amply supports the fact that Senator Kennedy's statements on defense and the missile gap in the late 1950s were sensible and responsible. In fact, his program for action made sense whether or not the intelligence on the Soviet ICBM program was accurate. To the extent that he had access to classified sources during the relevant period, Senator Kennedy had an even stronger basis for concern, as you know.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Paul".

Honorable McGeorge Bundy  
Special Assistant to the President  
The White House



ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON 25, D.C.

INTERNATIONAL SECURITY AFFAIRS

17 June 1963

MEMORANDUM FOR THE RECORD

SUBJECT: The Missile Gap, 1958 - 1960 -- The Public Record

Out of the extensive debate in the late 1950s over the existence and implications of a "missile gap" between the United States and the USSR came a flow of statements by public officials and others sufficient to justify a legitimate concern, on the public record alone, about the relative defense posture of the United States. Appendix A lists the stories in leading newspapers, magazines, and other periodicals which dealt with this subject from early in 1958 until the end of 1960. The following precis of the statements of selected officials and others during this period, as reported in these media, indicates the considerable, though often conflicting, testimony that the U.S. ICBM program lagged behind that of the USSR.

a. President Eisenhower generally defended the progress of the U.S. ICBM program, doubted USSR claims, kept missile production within the budget, noted some gains, and was annoyed at the statement by CIA Director Dulles in February 1960 that "by mid 1960 USSR would have between 40 and 45 ICBMs ready to fire, compared to 20 for the U.S."

b. Secretary of Defense McElroy in April 1958 saw no evidence of a Soviet lead in ICBMs. Ten days later his Deputy, Donald Quarles, saw the U.S. leading. McElroy's succeeding statements varied from time to time, such as the U.S. will have 300 ICBMs compared to 1,000 for the Soviets by 1962; we are about even; the U.S. will have 200 in 1962 compared to 600 for the USSR; Soviet strength is 10 ICBMs. His successor, Gates, saw the picture in January 1960 as optimistic and reassured a House Committee by downward revision of intelligence estimates of USSR accomplishments. He predicted the missile lag would end in 1962. In May 1960, Air Force Secretary Douglas says it is recognized that the Soviets may have more long-range missiles than we will have in the next two or three years.

c. Chairman of the JCS Twining said in January 1959 that the U.S. lagged and predicted 300 U.S. ICBMs compared to 1,000 for the USSR by 1962. A couple of weeks later he scoffed at USSR claims of superiority. His successor, General Lemnitzer, doubted in June 1960 that a missile gap existed.

d. Senator Symington has been consistent in saying there is a missile gap and in attacking Administration and Defense statements to the contrary. In January 1959 Senator Russell saw Russia as ahead of the U.S. in ICBMs. In July 1959 Senator Lyndon Johnson rapped McElroy's optimistic views. Senator Kennedy from December 1957 through 1960 consistently expressed his concern over the

missile gap and its implications. See his statements at Appendix B.

e. Other views:

Dr. York, DDR&E, said in February 1959 that, overall, the U.S. is about one year behind the Soviets in ICBMs. In September he said we are closing the gap. The next month he saw no lag by the U.S. in ICBMs.

Wehrner Von Braun in April 1959 put the U.S. lag at five years and in July 1960 saw the U.S. leading in the ICBM race.

CIA Director Dulles painted an optimistic picture in February 1959 (to which Symington added his prediction of a 4 to 1 U.S. lag by 1961). In February 1960 Dulles adjudged the USSR as having a 2 to 1 advantage by mid-1960. He was then charged with keeping JCS in the dark and he said he did this because of the unreliability of information.

In addition to the foregoing, there are statements by Secretary of Defense McElroy and of General Thomas White at the House Appropriations Subcommittee Hearings of 1959 and 1960, respectively, which acknowledge an existing Soviet lead in ICBMs. Mr. McElroy also concedes that the Soviets "have the capability of being far out in front of us in ICBM production" in the early 1960s. At Appendix C are a number of references drawn from Congressional Hearings in which responsible people express concern over the U.S. lag in long-range missiles, and its implications for our defense posture.

During this same period, books by military officers and others of considerable standing and experience make clear their conviction that there is a "missile gap" and their views on its implications. Excerpts from General Gavin's War and Peace in the Space Age (1957), General Taylor's The Uncertain Trumpet (1959), and Henry Kissinger's The Necessity for Choice (1961) are at Appendix D.

In short, there is a substantial public record during the late 1950s to support a legitimate concern about the lag in the U.S. ICBM program behind that of the Soviets and a concern for the implication of such a lag on our defense posture.

## APPENDIX A

STATEMENTS ON THE MISSILE GAP IN NEWS MEDIA, APRIL 1958-DECEMBER 19601958

- 4 April Secretary McElroy Reports No Evidence of Soviet Lead on ICBM - N.Y. Times.
- 14 April U.S. Missile Lead Seen by Deputy Secretary of Defense Quarles - N.Y. Herald Tribune.
- 1 August "Our Government's Untruths", column by Joseph Alsop in N.Y. Herald Tribune stating a heavy score in favor of USSR in operational ICBMs in gap years.
- 18 August Experts Consider American Long-Range Missile Program to be Shockingly Inadequate - with Reds 20 to 1 Superiority - Feature story by B/G Thomas R. Phillips (USA Ret) in St. Louis Post-Dispatch. Quotes no individual directly.
- 25 September Missile Lag Danger Seen by Senator Kennedy - Asks Step-up in U.S. Missile Development - Baltimore Sun.
- 23 November General Schriever Says U.S. Gains on Russians in Missiles - May Wind up About Same Time With Operational ICBMs - N.Y. Herald Tribune.

1959

- 8 January The Growing Missile Gap - long feature story by B/G Thomas R. Phillips (USA Ret) in the Reporter magazine. Quotes intelligence reports as saying the USSR has manufactured about 20,000 ballistic missiles and fired more than a thousand of them.
- 13 January Senator Symington Denies Accuracy of Statement by Vice President Nixon that U.S. is leading Russia in Developing Military Missiles - Baltimore Sun.
- 18 January Missile 'Gap' Debate Blurs Broader Issues - U.S. and Soviet Power Comparison Suffers from Poor Definition - Hanson Baldwin in N.Y. Times.
- 22 January In Press Conference at Pentagon Secretary McElroy stated: "As of now we have no evidence that - no positive evidence - that Russia is ahead of us in ICBMs, operational, at all."

1959

- 23 January McElroy Denies U.S. Lags on ICBM - Mark Watson in Baltimore Sun. (News report on press conference listed above.)
- 23 January McElroy's Claim on Missiles Distorts Intelligence Reports - Sec. Uses Expression 'Positive Evidence' - No Such Thing in Intelligence Estimates - General Phillips in St. Louis Post-Dispatch (His Interpretation of Press Conference).
- 23 January U.S. Lags Seriously in Missiles - Robert S. Allen in Virginia Sun. Quotes McElroy and General Twining (as Chairman of the JCS) as saying in 1962 U.S. will have 300 ICBMs and USSR 1,000.
- 24 January Symington Scores McElroy on ICBM - Sees U.S. Lagging - Jack Raymond in N.Y. Times.
- 26 January McElroy told Rep. Mahon in defense hearings that in "my own judgment we are about even with the Soviet Union in our ability to produce ICBMs."
- 29 January President Eisenhower in a news conference made general comments on a Khrushchev statement 28 January that Russia is now mass producing ICBMs with pinpoint accuracy - Ike said our missile system is going forward as rapidly as possible.
- 29 January Ike Defends U.S. Progress in ICBM Race - Baltimore Sun.
- 29 January Russia Ahead in Missiles, Senator Russell Says - Chicago Tribune.
- 29 January Twining Scoffs at Soviet Claim - Says Khrushchev's ICBM Boast 'Means Nothing' - Baltimore Sun.
- 30 January Behind the Debate on 'Missile Gap' - Charges of too much politics - By Marquis Childs - Washington Post & Times Herald.
- 3 February Leaders Give Their Views on Defenses - ICBM Lag Hit by Symington - McElroy Cites Rise in Power - New York Journal-American.
- 5 February Symington Firm in Missile View - Hears CIA - Still Predicts 4-1 U.S. Lag by 1961 - Philip Potter in Baltimore Sun.



1959

- 5 February      Eisenhower Doubts Reds on Missiles - Tells Nation to Quit Worrying - N.Y. Herald Tribune.
- 6 February      McElroy has Admitted That U.S. Will Have 200 ICBMs in 1962 Against 600 for Russia - Planners Fear Soviet Will Hold Unbeatable Margin by 1963 - General Phillips in St. Louis Post-Dispatch.
- 6 February      Big Fuss About Missiles - These Are the Facts - U.S. News & World Report survey, rehashing recent quotes of McElroy, Symington, et al.
- 6 February      McElroy's Views Are Question - Drew Pearson in Washington Post and Times Herald.
- 6 February      Surrender on Missiles - Editorial in Boston Herald, saying we must counter USSR missiles with missiles of our own.
- 8 February      Where We Stand in Missile Race - More on Eisenhower and Twining - N.Y. Times feature story.
- 8 February      Russia Gives Strong Indications It Has Operational ICBMs Despite Washington Skepticism - General Phillips in St. Louis Post-Dispatch.
- 14 February     NATO Missile Gap Could Spell Defeat in Europe - Phillips in Air Force Register.
- 15 February     Symington Disputes Early Operational Deployment of ICBMs - On NBC-TV's Meet the Press.
- 16 February     Dr. York Says U.S. Can Stop Sneak Blow - "In overall space and missile picture the U.S. is one year or perhaps less than a year behind and in some aspects such as guidance and re-entry this country is perhaps a little ahead of the Russians". - N.Y. Herald Tribune.
- 9 March          U.S. Ready if Reds Strike, McElroy Says - N.Y. Herald Tribune.
- 9 March          Widening The Missile Gap - It Still Exists - Senator Symington in a signed article in Space Age News.
- 9 March          Life and Death Debate Over Missile Program - President Sticks to Defense Budget but New Military Generation Wants More Hardware to Combat Blackmail - J. R. Shepley in Life Magazine.

1959

- 24 March Two Sides of the Missile Debate - One Group Stresses Missile Gap, Other Emphasizes Total Defense Power - St. Louis Post-Dispatch.
- 8 April Von Braun Puts Lag at Five Years - Washington Star.
- 10 April B/General A. W. Betts Sees No Gap; Scores Defense Critics - Armed Forces Management.
- 24 April U.S. Risking Missile Gap - Ray Cromley in N.Y. World-Telegram.
- 27 July Soviet Strength Put at 10 ICBMs by McElroy - Baltimore Sun.
- 27 July U.S. Missiles Best, View of McElroy - Doubts Red Lead - N.Y. Herald Tribune.
- 27 July Lyndon Johnson Raps McElroy View - Washington Star.
- 30 July Eisenhower Cites Gains in Missiles - Jack Raymond in N.Y. Times.
- 7 September U.S. Missiles vs Russia's - How the Race Stands Today - Overall Interview with Dr. York in U.S. News & World Report - 'We're Closing the Gap'.
- 6 October Dr. York Sees No Lag by U.S. in ICBMs - N.Y. Times, by John Finney.
- 19 November U.S. Intelligence Agencies Give Full Credence to Soviet Missile Claims Which Officials Doubt - General Phillips in St. Louis Post-Dispatch.

1960

- 21 January U.S. Estimating Power of Soviet on Basis of 'Intent', Gates Says - More Optimistic Picture Is Drawn from New System - John Norris in Washington Post.
- 23 January House Unit Reassured by Gates on Downgrading of USSR Intelligence Estimates - John Norris in Washington Post.
- 24 January Secretary of Air Force Sharpe Discounts Missile Gap - No Clear Indication USSR Is or Will Be Significantly Ahead of Us - Washington Post.

1960

- 27 January      Missile Gap Seen Likely to Get Worse - Comments of Congressional Leaders After Hearing White and Sharpe - Baltimore Sun.
- 27 January      Intelligence Uproar Blamed on Inept Pentagon Handling - Mark Watson in Baltimore Sun.
- 31 January      Two Sides Interpret Some Facts Differently - Air Force and Senate leaders vs. Administration and Army-Navy - Interpretive Report by Dick Fryklund in Washington Sunday Star.
- 1 February      Gates Sees Missile Lag Ending in 1962 - Baltimore Sun.
- 2 February      Gates Rejects General Power's Red Estimate of 300 Missiles to Wipe Out U.S. Ability to Retaliate - Baltimore Sun.
- 8 February      Ike Angered by CIA Chief Dulles' Disclosure that by mid 1960 USSR Would Have Between 40 and 45 ICBMs Ready to Fire to 20 for U.S. - Drew Pearson in Washington Post.  
(N.Y. Herald Tribune on 5 February Revealed This Secret Report by Joe Alsop.)
- 8 February      The Dangerous Game of Numbers - Missile Scoreboard - Showing USSR Well Ahead from 1960 through 1963 - John Steele in Life Magazine.
- 8 February      If War Came Now - Who Would Win? - U.S. Excels in Ability to Strike, Lags in Missiles - U.S. News & World Report.
- 15 February      Air Force General Walsh Warns of Russian Gains - Disputes New Estimates; Says Missile Gap Grows - New York Times.
- 15 February      CIA Boss Kept Defense Chiefs in Dark - John O'Donnell's Capitol Stuff Column in N.Y. Daily News.
- 16 February      Catching Up - Editorial Citing Recent Statements on Missile Gap - Washington Post.
- 20 February      Symington Says Public Misled on Missiles - That Secret Data Shows Russia Widens Gap - Baltimore Sun.

1960

- 25 February      Dulles Tells Congress He Did Not Give JCS Estimate on USSR Missiles Because of Unreliability of Information - Baltimore Sun.
- 26 February      Vital Point (On the Launchers) Ignored on Missiles - Feature column by John Norris in Washington Post.
- 28 February      Senator Case Defends Dulles on Charges of Withholding Missile Information from JCS - Baltimore Sun.
- 29 February      The Truth About Missiles - By 1962 Reds will have Edge in Long-Range Missiles - but will not be decisive against variety of U.S. weapons - U.S. News & World Report.
- 29 February      Budget Chief Stans Restates U.S. Space Superiority - Says This Is True With All Facts Taken Into Consideration - N.Y. Herald Tribune.
- 25 March          General Betts Says U.S. Fully Abreast of Russia in Weapons - Aviation Daily.
- 8 April           Administration Circulates 'White Paper' in Bid to Dispel Doubts on Defense Policy - Concedes USSR Reliance on Long-Range Missiles. Louis Draar in Wall Street Journal.
- 20 May           "It is recognized that the Soviets may have more long-range missiles than we will have in the next two or three years" - from speech by Secretary Douglas of Air Force at Des Moines, Iowa.
- 22 May           Missile Gap Is Still There, if Little Noted - John Norris in Washington Post.
- 26 May           The Confused Semantics of the Defense Debate - Douglass Cater, in The Reporter.
- 28 June           Missile Gap Is Doubted by Adm. Radford - Baltimore Sun.
- 14 July           Von Braun Sees U.S. Lead in ICBM Race - Ahead in ICBMs - Baltimore Sun.
- 31 July           Disastrous Missile Gap, Long Hidden From Public, Now Better Understood in Official Circles - General Phillips in St. Louis Post-Dispatch.

1960

- 24 September      General Schriever Says U.S. Leading on ICBM - Has None to Match MINUTEMAN and POLARIS - Denver Post, quoting press conference held at AFA Convention in San Francisco.
- 11 December      Institute for Strategic Studies (In a long study released in November 1960 on The Communist Bloc and the Free World) Puts USSR Missile Capability at 200 by 1962 - St. Louis Post-Dispatch.

APPENDIX B

STATEMENTS ON THE MISSILE GAP BY SENATOR JOHN F. KENNEDY, 1957-1960

We are behind, possibly as much as several years, in the race for control of outer space and in the development, perfection, and stockpiling of intermediate range ballistic missiles and long range ballistic missiles, rocket motors, jet engines, and new fuels....

Dec. 3, 1957  
Speech, National Conference of  
Christians & Jews, Conrad Hilton  
Hotel, Chicago (Chicago Tribune)

Our attention is logically and necessarily directed first at the short-range military steps necessary to keep the deterrent ratio from shifting still further to the Red side and to lessen their advantage, if possible. ~~side~~

Finally, if we do not take care, we will create a second gap - between the date when our present ready weapons are obsolescent and the date when our ballistic missiles are operational in any sufficient quantity. To prevent this short-term gap, and to make certain that we have ended the missile-lag by 1964, when we shall have mass production, we hope, of the MINUTEMAN solid-fuel missile, may well require a complete re-examination of our traditional systems of evaluating, budgeting, researching, assigning, developing, and procuring weapons.

Aug. 14, 1958  
Congressional Record,  
P. 16208-10

I recently spoke on the Senate floor about the segment which has to do with closing the military "gap". The most pressing technological problem, of course, is the missile lag between the United States and the Soviet Union, which seems certain to continue to grow during the next five years. But we must not overlook the other instruments of our military power, including our capacity to wage limited war and to airlift troops to trouble spots immediately. Both our ability to maintain a balanced ratio of nuclear deterrence and our ability to defy the non-nuclear threat of the Soviet Union and China, especially in the years of 1960-1964, must be vigilantly analyzed and corrected in the next two years - not at some future date when the Soviet Union will have consolidated all the military advantages.

Sept. 18, 1958  
The Reporter,  
"When the Executive Fails to Lead"

We are going to be faced with a missile gap which will make the difficulties of negotiating with the Soviet Union and the Chinese in the 1960's extremely difficult....

Jan. 3, 1960  
Meet the Press - TV

This year, our "mix" of forces undoubtedly is "far superior". But it is indisputable that we are today deficient in several areas - and that in one of those areas, ballistic missiles, our deficiency is likely to take on critical dimensions in the near future. \*\*\*

. . . We must provide funds to step up our POLARIS, MINUTEMAN and air-to-ground missile development program, in order to hasten the day when a full, mobile missile force becomes our chief deterrent and closes any gap between ourselves and the Russians. In the meantime, we must step up our production of ATLAS missiles to cover the current gap as best we can. As a power which will never strike first, our hopes for anything close to an absolute deterrent must rest on missiles which come from hidden, moving, or invulnerable bases which will not be wiped out by a surprise attack: POLARIS missiles on atomic submarines, MINUTEMAN missiles on moving flatcars or in underground complexes, or long-range air-to-ground missiles on slow-flying planes or launching platforms. A retaliatory capacity based on adequate numbers of these weapons would deter any aggressor from launching or even threatening an attack - an attack he knew could not find or destroy enough of our force to prevent his own destruction. \*\*\*

. . . If we hope to close whatever missile gap exists in 1963 or thereafter, these funds must be provided in 1960. \*\*\*

. . . Let me try to summarize what I said by stating that I do not believe that the United States is building up its missiles fast enough. I believe we should have more POLARIS submarines. I believe that we should provide at least a standby for an air alert. I believe that we should develop a missile warning system. I cannot find any stronger words than I have used to say how vitally important I feel it is to do these things.

Feb. 29, 1960  
Congressional Record,  
 P. 3580-6

. . . The Russian space advances have demonstrated that the Soviet possesses rocket engines of far greater thrust than any in our own arsenal. This lead, in large measure, accounts for Soviet superiority in the field of ICBM's. . . . new developments in space knowledge will almost inevitably lead to scientific breakthroughs of military importance. The Russians must not be first with these breakthroughs.

April-May 1960  
Ground Support Equipment

First, we must make invulnerable a nuclear retaliatory power second to none...by stepping up our development and production of the ultimate missiles that can close the gap and will not be wiped out in a surprise attack -- POLARIS, MINUTEMAN, and long-range air-to-ground missiles--meanwhile increasing our production of ATLAS missiles, hardening our bases, and improving our continental defense and warning systems.

June 14, 1960  
Congressional Record,  
p. 11630



APPENDIX C

EXTRACT FROM HOUSE APPROPRIATIONS SUBCOMMITTEE HEARINGS, 26 Jan., 1959

"Mr. Mahon: The next question, which I wrote out in longhand this morning, more or less has been answered. From the standpoint of ICBMs in being for utilization, are we today ahead of the USSR? -

"Secretary McElroy: ICBM utilization? I do not think we are ahead of the USSR.

"Mr. Mahon: But you think we will be behind, according to present projections, in 1960, 1961 and 1962?

"Secretary McElroy: It looks as if we could be behind, Mr. Chairman.

"Mr. Mahon: According to your calculations and your charts, we would be behind.

"Secretary McElroy: Let's go back to what General Twining said about the heavy bomber, Mr. Chairman. We assumed two or three years ago that the Russians were going to go ahead and use their full capability to produce heavy bombers. They did not use their full capability to produce heavy bombers. So far as we know they did not produce anywhere near the number of heavy bombers we estimated they could produce. The same thing could happen with respect to the ICBM estimates. Again we are saying they could produce "X" numbers of ICBMs by "Y" date. We are not saying that they will actually do it. There are many factors involved in such a decision on their part.

"Mr. Mahon: Yes. They did not, but they had the capability, you thought, and you think now they have the capability of being far out in front of us in ICBM production.

"Secretary McElroy: If you express it that way, yes.

EXTRACT FROM HOUSE APPROPRIATIONS SUBCOMMITTEE HEARINGS, January 1960

"General White: . . . If we get warning, we are in a very good position vis-a-vis the potential enemy now, even in this period of their having a relatively larger number of ICBMs than we have."

21

EXTRACTS FROM PREPAREDNESS INVESTIGATING SUBCOMMITTEE  
OF THE SENATE COMMITTEE ON ARMED SERVICES, 1957 - 1958

Dr. Edward Teller. "The ballistic-missile race in which we very clearly appear to be not in the lead, where the Russians are ahead of us, is only one special case, and the trouble is a more general one." p. 10. Teller then outlines a program generally similar to those which Senator Kennedy was advocating.

General James Doolittle. "...In the field of long-range missiles, surface-to-surface missiles, IRBMs and ICBMs, she is certainly ahead of us." p. 111. He then calls for more SAC aircraft, more airfields, dispersal, hardening, and achievement in fact of the one-third air alert.

Secretary of Defense Neil McElroy.

Mr. Weisl. "Are we ahead or behind the Russians in the development of the intercontinental ballistic missile?"

Secretary McElroy. "I don't believe we have positive knowledge as to whether we are behind, and I am quite sure we don't have positive knowledge as to whether we are ahead." p. 198.

Deputy Secretary of Defense Donald Quarles. "Taking the long-range ballistic-missile program...I estimate that as of this time our program is either on a par with theirs, or that the differences are such that viewed, by and large and taking everything into account, one would find it very hard to say which program is ahead." p. 265.

"...as Secretary McElroy said, I feel that we should base our programs on the assumption that they are ahead..." p. 266.

General Curtis LeMay.

Mr. Weisl. "Would you have any warning system at all today if Russia released ballistic missiles against us?"

General LeMay. "No effective warning system; no. We might detect one of them, but it would probably be accidental rather than by design." p. 906.

Extract from The Uncertain Trumpet by General Maxwell D. Taylor

... I would like to return to an assertion which has been made in the foregoing discussion to the effect that new factors have arisen which require a complete reappraisal of our military needs. Specifically, what are these factors and what is their bearing upon our security?

The first factor is the loss by the United States of technological superiority over the USSR in many fields of military weaponry. While it is dangerous to generalize on limited evidence, it is impossible to deny that the Soviet Union leads the United States today in such important areas as long-range missiles and certain aspects of operations in space. Having a well-developed skepticism toward information tending to inflate the strength of an enemy, I have been slow to accept the reality and the significance of the so-called Missile Gap. Reluctantly, I have concluded that there is indeed such a gap which, in combination with other factors which will be mentioned, has a most significant bearing upon our military security.

We have ample evidence that the Soviet Union went into high gear in the development of medium- and long-range missiles well before the United States. They saved their money on bombers and spent it on missiles. Also, we must accept the fact that they have been successful in their missile programs despite the occasional failures which all missile makers know so well. My personal conclusion is that until about 1964 the United States is likely to be at a significant disadvantage against the Russians in terms of numbers and effectiveness of long-range missiles--unless heroic measures are taken now.

This preponderant missile strength on the part of the Russians will be all the more significant because the United States will not have an effective antimissile defense during all or most of the period of the missile gap.

\* \* \* \*

In summary, between now and 1961, because of our superiority in manned bombers which still have a reasonable chance of getting to target the United States would appear to have a considerable advantage if not caught by surprise. If the USSR achieved a surprise blow, the survival

probability on both sides would seem about even because the lesser number of Soviet delivery means would be largely offset by the inadequate protection of military and civil targets in the United States.

In the mid-term period beginning about 1961, the United States retaliatory force will include a mix of ballistic missiles and bombers operating from known, fixed sites in the United States. In limited compensation for this exposure of the retaliatory force, we can count upon having taken some dispersion and hardening measures and, if all goes well, upon having some operational Polaris missile submarines. But there can still be no antimissile defense (to include early warning) for several more years. The antibomber defense may be improved slightly but the low-level defense will be a question mark, as will any effective fall-out protection for the civil population.

In this period the USSR may be expected to have a marked superiority in ICBM's, in strategic target intelligence, and in the protection and concealment of its strategic strike forces. It will probably have a good antibomber defense and an advanced civil defense program. Under these conditions, the United States will be at a serious disadvantage in general atomic war regardless of how the first blow is struck. There are, however, ways to mitigate this disadvantage--if heroic measures are taken now.

The net effect for the present and mid-term future of the two foregoing factors will be a serious decline in the effectiveness of our deterrent capability for the prevention of general atomic war.

\* \* \* \*

In summary, the United States faces a period of several years in which we will be inferior to the USSR both in general-war and in conventional, counterattrition forces. It will be a period in which our leaders will be hard put to maintain our world position in the face of the probable increased Soviet pressures. These adverse conditions will tend to loosen the bonds of our alliances and to increase the trend toward neutralism and compromise among the weak. The haunting fear of general atomic war through Soviet surprise attack or through miscalculation will bear heavily upon our leaders, faced with the requirement to act decisively under these conditions of inferiority.

\* \* \* \*

Extract from War and Peace in the Space Age by Lt. Gen James M. Gavin

Little has been released of a factual nature on the US ICBM program, although it is a matter of general knowledge that it will be several years before we have an ICBM capability of any significance. This suggests that we are now entering a missile-lag period in which the Soviets will have a steadily increasing ICBM striking capability that we will be unable to match for several years, thus making missile "retaliation" as such, by us, rather meaningless--meaningless except for such shorter-range missiles as IRBMs that we may be able to deploy and maintain on foreign soil or in foreign waters. These will also seriously lag the Soviet capability in the same ranges.

The Soviets now have shorter-range missiles (seven hundred mile and twelve hundred mile) and their threat at the time of the Suez crisis was not an idle boast. Appearing on "Capitol Cloakroom", as a CBS radio broadcast, on December 10, 1956, the Honorable C. Douglas Dillon, then the US Ambassador to France, made quite clear that in his opinion it was the Soviet threat that upset British-French plans to go through with the Suez operation. If this is true, then it was missile diplomacy at its best, and we shall be exposed to more of it as we get farther into the period of "missile lag." (Page 6).

Extracts from The Necessity for Choice by Henry A. Kissinger

## "2. The Strategic Problem of Deterrence

For all the heat of the controversy, it is important to note that there is no dispute about the missile gap as such. It is generally admitted that from 1961 until at least the end of 1964 the Soviet Union will possess more missiles than the United States. The disagreement concerns the significance of this state of affairs. There are three schools of thought: (1) The Eisenhower Administration held that the diversity of our retaliatory force compensated for our inferiority in long-range missiles. The combination of airplanes, Polaris submarines and long-range missiles would continue to make the risks of aggression prohibitive for the Communist states. Hence deterrence would remain unimpaired. (2) Some critics believe that the missile gap may enable the Soviet Union to launch a surprise attack on the United States. In their view the missile gap turns into a deterrent gap. (3) A third group is of the opinion that even if the disparity in strategic striking power does not reach the point at which a Soviet surprise attack on the United States becomes possible, it will nevertheless enable the Communist states to black-mail all contiguous areas. Even after the missile gap ends, so this argument goes, our retaliatory force will no longer be able to protect major portions of the free world. The issue then turns (1) on our ability to deter all-out war and (2), assuming this problem to be solved, the ability of the threat of all-out war to deter other forms of aggression."

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"Under the best of circumstances, then, the missile age will pose grave tasks and serious perils. The missile gap in the period 1961-1965 is now unavoidable. Lead-times of modern equipment are so long that even should we change course immediately we could narrow the gap but not close it. If our retaliatory force remains highly vulnerable or if the Soviet Union produces more missiles than now appears likely, the Soviet Union could be tempted to launch a surprise attack. Even if surprise attack were avoided, we could provoke a pre-emptive attack by the design of our retaliatory force.

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We could be subjected to a pre-emptive attack also if we continue to rely on the threat of all-out war to deter all forms of Soviet blackmail. For then in a crisis--perhaps one not even directly provoked by the USSR such as the revolution in Iraq--our threat, if taken seriously, might cause the Soviet leaders to believe that they have no recourse other than to strike first.

These problems should not be ascribed entirely or even largely to the missile gap. The missile gap does not so much change strategic relationships as make them explicit. It speeds up what technology would have made inevitable in any case: the decreasing utility of the threat of all-out war as deterrence for an ever wider range of challenges. Even if the Eisenhower Administration were correct in its assumption that the missile gap will not lead to a Soviet surprise attack--and no Administration would deliberately stake the fate of the country--fundamental security problems would remain. Overcoming the vulnerability of our retaliatory force is the condition of security policy. It cannot be its sole aim. For an invulnerable retaliatory force will bring us face to face with the issue we have avoided for nearly a decade: the relation between deterrence and strategy should deterrence fail. Nothing could be more disastrous for a new Administration than to patch up present flaws while continuing to beg all principal questions."